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Validation of a Model for Implementing Health System Policies in the Social Security Organization

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ABSTRACT

The aim of the present study was to validate a model for implementing health system policies in the Social Security Organization. The present study was quantitative in method and applied in terms of purpose. The statistical population of the study included all managers and senior experts in the field of the health system of the Social Security Organization, totaling 550 individuals, from whom a sample size of 227 was determined. The main instrument for data collection in this study was a researcher-made questionnaire. The research questionnaire consisted of 105 items, and its statements were designed based on a five-point Likert scale. Content validity was used to ensure the validity of the questionnaire. To test the model and examine the relationships among variables, structural equation modeling using the partial least squares approach and SmartPLS version 3 was employed. The results showed that the model fit and predictive indices, including an adjusted R^2 of 0.601, $GOF = 0.425$, and $Q^2 = 0.378$, indicated appropriate fit and very strong predictive power of the proposed model. The validity and reliability of the constructs were also fully confirmed, with AVE values above 0.5 and CR and Cronbach's alpha values above 0.7. The findings indicated that the most important challenges in implementing health policies in the Social Security Organization include weakness in the monitoring and evaluation system, shortage of sustainable financial resources, political interference, lack of consolidation of insurance funds, and structural inefficiency. At the same time, the behavioral index, with a mean of 3.62, had the highest status among the indices. Based on the results of the Friedman test, the priorities of the related factors were determined as free and healthy competition, alignment of expertise with duties, and reduction of out-of-pocket payments by the public, respectively. Finally, this model has high executive and policy-making applicability and can be used as an effective basis for transforming health system policies in the country, particularly in the Social Security Organization and other insurance funds.

Keywords: Social Security Organization; public policies; pathology; health system

Introduction

Health system policies constitute one of the most consequential domains of public policy because they directly shape access to care, financial protection, service quality, population health outcomes, and the legitimacy of public institutions. In contemporary health systems, policy formulation alone is insufficient; the decisive challenge lies in translating policy

intentions into operational arrangements, organizational routines, resource allocation mechanisms, regulatory practices, and measurable outcomes. This issue is particularly important in large insurance-based and public service organizations, where policy implementation depends not only on the technical quality of policy design but also on managerial capacity, structural coherence, stakeholder alignment, financial sustainability, administrative coordination, and the responsiveness of service delivery mechanisms (Ohu, 2025; Parker et al., 2025). Accordingly, the implementation of health system policies should be examined as a multidimensional process that connects public administration, health management, organizational behavior, policy analysis, and health system performance.

The distinction between policy formulation and policy implementation has become increasingly important in health policy studies. Many health reforms are designed around normative objectives such as equity, efficiency, universal coverage, accountability, service integration, and cost containment, yet their practical results often differ from initial expectations. This divergence reflects the existence of implementation gaps, policy resistance, institutional fragmentation, and conflicts among actors involved in the policy process. In the Iranian health system, studies have emphasized that the implementation of health policies is affected by both enabling and constraining factors, including governance arrangements, resource availability, policy coherence, intersectoral coordination, and administrative capacity (Abolhasani et al., 2024). Similarly, earlier attempts to present models for effective implementation of health system policies have shown that implementation should be understood through a combination of managerial, structural, environmental, and behavioral components rather than through a single technical or administrative lens (Masoumi et al., 2019).

From a public policy perspective, health policy implementation is inherently political. Health policies distribute resources, define institutional responsibilities, regulate professional and organizational behavior, and influence the interests of patients, providers, insurers, policymakers, and public agencies. Therefore, implementation is shaped by power relations, stakeholder positions, political feasibility, and the capacity of decision-makers to manage conflict. Political analysis has been introduced as a key requirement for understanding why some health policies are implemented successfully while others encounter resistance, delay, or partial execution (Campos & Reich, 2019). In this regard, policy conflict management is particularly relevant in health systems because multiple actors with competing values and institutional mandates may interpret policy priorities differently, leading to inconsistency in execution and weak alignment between policy objectives and operational behavior (Baki Hashemi et al., 2021). Evidence from the Health System Transformation Plan also indicates that policy resistance may emerge when reforms alter incentives, redistribute authority, or place new pressures on organizations and professional groups (Mohammadi et al., 2022).

The complexity of health policy implementation is intensified by the multilayered structure of health systems. Health systems include financing mechanisms, insurance arrangements, service delivery networks, regulatory institutions, human resources, information systems, and organizational cultures. These components interact dynamically, meaning that a change in one part of the system may create intended or unintended consequences in other parts. Health system resilience literature has therefore emphasized the capacity of health systems to absorb shocks, adapt to changing conditions, and maintain essential functions under pressure (Fridell et al., 2020). Resilience is closely connected to policy implementation because resilient organizations are more capable of translating policies into practice despite financial constraints, demographic changes, crises, and administrative uncertainty. The experience of health system reform during and after COVID-19 further

confirms that large-scale reforms require strong institutional learning, adaptive governance, and coherent implementation strategies if they are to move systems toward universal healthcare and improved public value (Parker et al., 2025).

Health policy implementation also depends on the availability and use of evidence. Implementation research has been proposed as a means of strengthening health policy and systems by embedding systematic inquiry into the process of policy execution, monitoring, and adaptation. Multi-country evidence shows that implementation research can help policymakers understand contextual barriers, identify feasible strategies, and improve the alignment between policy design and real-world conditions (Langlois et al., 2019). In developing countries, the relationship between research systems and health policymaking is especially important because evidence production, knowledge translation, and institutional capacity can determine whether policies are grounded in practical realities or remain disconnected from implementation environments (Gholipour Souteh et al., 2019). Consequently, model validation in health policy implementation is not merely a methodological exercise; it is a way to strengthen the evidence base for administrative decision-making and policy improvement.

One of the most important dimensions of health policy implementation is efficiency. Health systems operate under persistent resource constraints, and organizations responsible for financing or delivering health services must ensure that available resources are used effectively. Efficiency analysis has become a major theme in health systems research, particularly in relation to hospitals, insurance systems, and service delivery organizations. Systematic evidence on health system efficiency demonstrates that assessing performance requires attention to inputs, outputs, service quality, and contextual conditions (Mbau et al., 2023). Data Envelopment Analysis and related approaches have been widely applied in healthcare, especially in hospital settings, to evaluate the relative efficiency of service units and identify opportunities for improvement (Kohl et al., 2019). For organizations such as the Social Security Organization, which is responsible for a wide population and major financial flows, policy implementation cannot be separated from questions of efficiency, cost management, resource allocation, and organizational performance.

In addition to efficiency, organizational health literacy and communication capacity are increasingly recognized as essential to health system functioning. Organizations that communicate clearly, reduce administrative complexity, and support users in navigating services are more likely to implement policies in a way that is understandable, accessible, and equitable. Evidence from hospitals shows that organizational health literacy varies across public, private, and university settings and can influence the ability of institutions to respond effectively to patient needs (Hayran et al., 2019). In the same vein, public policy communication has become more complex in the digital era, where citizens interact with institutions through social media, online platforms, and digital feedback mechanisms. Government–citizen interactions through social media may influence institutional trust and the effectiveness of public health policy communication (Zhang & Lu, 2025). Communication strategies are therefore not peripheral to policy implementation; they are integral to public understanding, acceptance, and compliance.

The digital transformation of public administration has created additional opportunities and challenges for health policy implementation. Digital-era governance emphasizes integration, data-driven decision-making, platform-based service delivery, and the redesign of administrative processes. Health policy can be examined through this lens because digital technologies increasingly affect insurance management, electronic health records, monitoring systems, patient communication, and service coordination (Klenk, 2025). Artificial intelligence is also becoming relevant to public health and

health policy through its potential applications in prediction, surveillance, decision support, service planning, and risk management (Aslan, 2024). At the same time, the use of AI tools in healthcare raises ethical, regulatory, and public health risk management issues, especially when such tools are applied in sensitive areas such as mental health therapy (Ohu, 2025). Therefore, policy implementation models must be flexible enough to account for technological change while remaining grounded in accountability, equity, and institutional responsibility.

Health policies are also implemented within social contexts that affect their legitimacy and distributive consequences. Issues such as gender, migration, aging, mental health, and social vulnerability influence both policy priorities and implementation outcomes. Studies on gender and health policymaking show that patriarchal structures may shape participation in policy processes and affect the visibility of certain professional and social perspectives (Inayat et al., 2024). Research on healthcare exclusion during pandemic conditions indicates that attitudes toward undocumented immigrants can influence debates on access, entitlement, and the ethical boundaries of health policy (Nunez, 2025). Similarly, psychosocial changes among immigrant mothers and young children demonstrate that health-related policies cannot be reduced to clinical or administrative variables, because trauma, social context, and family conditions shape the actual needs of populations (Paris, 2025). These studies collectively highlight that implementation models should incorporate contextual and social dimensions rather than limiting analysis to formal organizational structures.

Demographic change is another crucial consideration for health policy implementation, particularly in insurance organizations. Population aging increases demand for chronic disease management, rehabilitation, long-term care, specialized services, and sustainable financing mechanisms. Policy models designed to enhance the social health of older adults show that elderly health requires coordinated attention to social participation, service accessibility, welfare support, and institutional responsiveness (Koosha et al., 2025). In organizations such as the Social Security Organization, demographic shifts affect both the demand side and the financing side of the health system. As the population ages, the balance between contributors and beneficiaries may change, and policy implementation must therefore be assessed in relation to long-term sustainability, resource planning, and service adaptation.

Mental health policy provides another example of the importance of implementation quality. Policies related to mental health in schools, workplaces, and digital environments require coordination among institutions, evidence-informed interventions, and careful monitoring of outcomes. School mental health policies can affect student well-being and perceived school climate, indicating that policy implementation at the institutional level may produce measurable psychosocial outcomes (Schrijvers et al., 2026). Policies designed to mitigate the mental health impact of internet use among children and adolescents further demonstrate that contemporary health policy must respond to behavioral risks emerging from digital environments (Tadpatrikar, 2025). However, debates around smartphone use and mental health suggest that policy solutions should go beyond restrictive measures and address broader social, educational, and developmental conditions (Weiss & Bonell, 2025). These examples are relevant because they show that successful health policy implementation requires a balance between regulation, education, service design, and stakeholder engagement.

Workplace and organizational environments are equally important in health policy analysis. The development of a National Policy Index for worker mental health illustrates how national-level policy arrangements can be linked to organizational psychosocial safety climates, suggesting that policies influence not only service outputs but also workplace conditions and institutional behavior (Potter et al., 2024). In healthcare organizations, the implementation of patient-centered care models

depends on provider perspectives, professional cooperation, organizational readiness, and practical barriers within hospitals (Piskorz-Ryń et al., 2024). These findings underscore the behavioral dimension of policy implementation, including accountability, service quality, customer orientation, lawfulness, and organizational performance. A valid model of health policy implementation should therefore measure not only structural and contextual factors but also behavioral indicators that reflect how policies are enacted by managers, professionals, and frontline units.

Public policy implementation also requires effective administrative communication and coordination across sectors. Evidence from public policies and communication strategies in Zimbabwe's eye healthcare industry shows that sectoral policy outcomes are influenced by how public institutions communicate with stakeholders, define priorities, and coordinate implementation processes (Tshuma & Mpofo, 2024). In Iran, policy evaluation models based on upstream documents emphasize the need for administrative systems to align policy assessment with higher-level strategic, legal, and developmental frameworks (Rahmani et al., 2023). The advocacy coalition framework has also been used to analyze health system policy processes, showing that coalitions, beliefs, and institutional interactions influence the direction and implementation of major reforms (Ebrahimi et al., 2020). These perspectives are particularly important for the Social Security Organization because it operates at the intersection of health financing, public administration, insurance governance, and service provision.

Given these considerations, the validation of a model for implementing health system policies in the Social Security Organization has both theoretical and practical significance. Theoretically, such a model can integrate structural, behavioral, contextual, managerial, financial, regulatory, and organizational performance dimensions into a coherent framework. Practically, it can provide policymakers and senior managers with a diagnostic instrument for identifying implementation strengths and weaknesses, prioritizing improvement areas, and aligning health policy execution with institutional capacity. In large public insurance organizations, a validated model can support evidence-based governance by clarifying which components are most influential, how they are interrelated, and which factors require priority intervention. This is especially important in systems facing financial pressure, rising service demand, demographic change, technological transformation, and increasing expectations for accountability and quality.

Therefore, the aim of the present study was to validate a model for implementing health system policies in the Social Security Organization.

Methodology

The present study was quantitative in method and applied in terms of purpose. The statistical population of the study included all managers and senior experts in the field of the health system of the Social Security Organization who work in medical and administrative centers throughout the country. Based on the available information, the statistical population was estimated to include 550 individuals. The sample size was determined to be 227 individuals based on the table and statistical calculations related to a finite population. Considering the geographical dispersion of the statistical population and the limitations in accessing all individuals, convenience sampling was used. Accordingly, the questionnaire was distributed among managers and senior experts who were able to cooperate and respond during the implementation period of the study. The main instrument for data collection in this study was a researcher-made questionnaire. The research questionnaire consisted of 105 items, and its statements were designed based on a five-point Likert scale. Content validity was used to

ensure the validity of the questionnaire. For this purpose, the initial questionnaire was provided to a number of academic experts and specialists in the field of the health system, and after receiving their views and suggestions, the necessary revisions were made to the structure, order, and content of the items. In addition, indices such as Cronbach’s alpha and composite reliability were used to examine the reliability of the instrument in order to determine the stability and reliability of the questionnaire. To test the model and examine the relationships among variables, structural equation modeling using the partial least squares approach and SmartPLS version 3 was employed.

Findings and Results

In this study, 227 managers and senior experts in the health system of the Social Security Organization participated. In terms of gender, 67.4% were male and 32.6% were female. In terms of age, the highest frequency belonged to individuals over 51 years of age (45.5%), followed by the 41–50 age group (44.1%), while only 10.6% were in the 31–40 age range. In terms of education, 81.5% held a doctoral degree and 18.5% held a master’s degree. Regarding work experience, the highest frequency belonged to 11–15 years of experience (39.6%), followed by 6–10 years of experience (33%). In addition, 13.7% had 16–20 years of experience, 9.3% had more than 21 years of experience, and only 2.2% had less than 5 years of work experience.

Before examining the model and the research hypotheses, it was first necessary to assess the normality of the research variables using the Kolmogorov–Smirnov test. Therefore, Table 1 examines the normality of the research variables.

Table 1. Assessment of the Normality of the Research Variables

Variables	Z Statistic	Significance Level
Factors related to the implementation of health system policies	0.103	0.001
Organizational performance	0.109	0.001
Strategic and managerial	0.137	0.001
Health system policies	0.060	0.048
Structural dimension	0.074	0.004
Behavioral dimension	0.074	0.004
Contextual dimension	0.051	0.020

According to Table 1, it can be concluded that the significance levels of the research variables are less than 0.05, indicating that the above variables are not normally distributed. Therefore, since all the variables examined in the present study were not normal, PLS software was used to conduct structural equation modeling, because one of the reasons for using this software is the non-normal distribution of the data for all variables included in the research model.

To validate the model, structural equation modeling analysis was conducted using PLS software. After examining the measurement model, the significance of the structural model was assessed. Table 2 presents the significance test of the research variables.

Table 2. Examination of the Research Variables

Relationships	Path Coefficient (Beta)	Standard Deviation	t-value	Significance Level	Result
Structural dimension ⇌ Managerial efficiency	0.627	0.054	11.712	0.001	Significant
Structural dimension ⇌ Tariff-setting and coverage	0.865	0.019	45.310	0.001	Significant
Structural dimension ⇌ Laws and regulations	0.851	0.019	43.741	0.001	Significant
Structural dimension ⇌ Frameworks	0.863	0.017	51.021	0.001	Significant
Structural dimension ⇌ Strategy	0.821	0.028	29.317	0.001	Significant
Structural dimension ⇌ Social conditions	0.713	0.038	18.811	0.001	Significant
Structural dimension ⇌ Organizational resources	0.811	0.027	30.309	0.001	Significant
Behavioral dimension ⇌ Accountability	0.800	0.025	31.840	0.001	Significant
Behavioral dimension ⇌ Service quality	0.750	0.034	22.362	0.001	Significant

Behavioral dimension ⇐ Customer orientation	0.801	0.026	31.352	0.001	Significant
Behavioral dimension ⇐ Lawfulness	0.671	0.046	14.507	0.001	Significant
Behavioral dimension ⇐ Organizational performance	0.768	0.037	20.597	0.001	Significant
Behavioral dimension ⇐ Financial	0.802	0.032	25.036	0.001	Significant
Contextual dimension ⇐ Economic conditions	0.727	0.036	20.238	0.001	Significant
Contextual dimension ⇐ Performance	0.883	0.017	51.291	0.001	Significant
Contextual dimension ⇐ Financial	0.741	0.036	20.320	0.001	Significant
Contextual dimension ⇐ Harms	0.722	0.036	20.238	0.001	Significant
Contextual dimension ⇐ Culture	0.713	0.038	18.965	0.001	Significant
Health system policies ⇐ Structural index	0.928	0.014	67.982	0.001	Significant
Health system policies ⇐ Behavioral dimension	0.948	0.010	94.266	0.001	Significant
Health system policies ⇐ Contextual dimension	0.793	0.036	21.943	0.001	Significant

Based on Table 2, it can be concluded that the t-value values for the above relationships fall outside the range of -2.58 to 2.58; therefore, these relationships are significant at the 99% confidence level. In other words, the relationships of the structural, behavioral, and contextual indices with their dimensions are significant, and these three indices affect their respective dimensions. It is also observed that health system policies have a significant effect on the structural, behavioral, and contextual dimensions. Based on the following tests, the predictive power of the criterion variable is assessed. Therefore, Table 3 examines the predictive power of the criterion variable in the study.

Table 3. Predictive Power of the Criterion Variable

Criterion Variable	Predictor Variables	Adjusted R ²	Result	GOF	Result	Stone–Geisser Q ² Index	Result
Health system policies	Structural dimension; Behavioral dimension; Contextual index	0.601	Strong	0.425	Very strong	0.378	Very strong

The results of the table show that the adjusted R² index is reported for the criterion or endogenous variable, and its value is evaluated based on three values: 0.19 for weak predictive quality, 0.33 for moderate predictive quality, and 0.67 for strong predictive quality. This indicates that health system policies, the structural index, the behavioral index, and the contextual index collectively predict the criterion or endogenous variable at a level of 60% and with strong predictive power. On the other hand, the GOF test, which refers to the goodness-of-fit index, had a value of 0.425 and was evaluated based on three standard values: 0.01 for weak quality assessment, 0.26 for moderate quality assessment, and 0.36 for strong quality assessment. It was determined that the fitting power of this model for examining the second sub-question of the study was very strong. In addition, the Stone–Geisser Q² index was reported for the endogenous variable, and its values were evaluated based on three values: 0.02 for weak structural model quality, 0.15 for moderate structural model quality, and 0.35 for strong structural model quality. Accordingly, it was found that this value was approximately 39% for the criterion variable, indicating that the quality of the structural model in the third sub-question of the study was evaluated as very strong. As a result, the validation of the components of health system policy implementation in the Social Security Organization is confirmed. The measurement model of the study in the coefficient estimation mode and coefficient significance mode is presented in Figures 1 and 2.

Finally, the prioritization of the factors affecting the implementation of health system policies in the Social Security Organization is presented.

Table 4. Prioritization of the Factors Affecting the Implementation of Health System Policies in the Social Security Organization

Factors	Mean Rank	Priority Ranking	Chi-square Statistic	Degrees of Freedom	Significance Level
Providing quality services at the appropriate time (in the shortest possible time)	19.40	8	1252.596	30	0.001
Easy access to services	17.32	9			
Reducing out-of-pocket payments by the public under any title	22.07	3			
Preserving the respect and dignity of patients and clients	16.53	13			
Protecting stakeholders' interests	16.57	12			
Alignment of personnel expertise with their duties	22.27	2			
Commitment of organizational members	21.80	4			
Employing capable and trained human resources	17.78	7			
Free and healthy competition	22.80	1			
Referral system (to help prevent the provision or receipt of unnecessary services and to save a substantial portion of health system costs)	16.72	11			
Implementation of the family physician program	16.89	10			
Use of necessary technologies	15.54	20			
Improving interactions among relevant organizations and between the organization and clients	18.14	6			
Clear and explicit goal setting	15.57	19			
Having a long-term plan and the commitment of all high-level national authorities to the country's long-term plans	15.84	16			
Efficiency of executive programs	15.58	18			
Planning for the development of organizational resources	14.54	23			
Implementability of policies	12.63	28			
Reducing the role of political factors	8.19	30			
Efficient management	17.62	8			
Managing citizens' costs in the health system based on the electronic health record	13.57	25			
Training and development of human resources	15.94	15			
Proper management of organizational resources	13.22	27			
Sustainability of policies	14.96	22			
Strengthening policies	15.76	17			
Organizational transparency	16.31	14			
Population covered by the organization	14.96	21			
Demographic structure (considering the aging trend in the country, the need for health services at specialized and subspecialized levels is increasing)	14.52	24			
Growth of modern medical technology (which has significantly increased and will continue to increase health system costs)	11.56	29			
Level of social welfare	13.25	26			
Gross national product (the health system's share is financed from national production, and any change in this factor will affect the health system's share)	8.17	31			

The results of Table 4 show that the factor of free and healthy competition obtained the highest mean rank. This indicates that free and healthy competition is the most important factor affecting the implementation of health system policies in the Social Security Organization. However, the lowest mean rank was related to the factor of gross national product, meaning that the health system's share is financed from national production, and any change in this factor will affect the health system's share. On the other hand, the significance level obtained from the chi-square statistic of the Friedman test indicates that the percentage error for confirming the significant effect of the above test is significant at the 95% confidence level. Therefore, the prioritization of the factors affecting the implementation of health system policies in the Social Security Organization is confirmed.

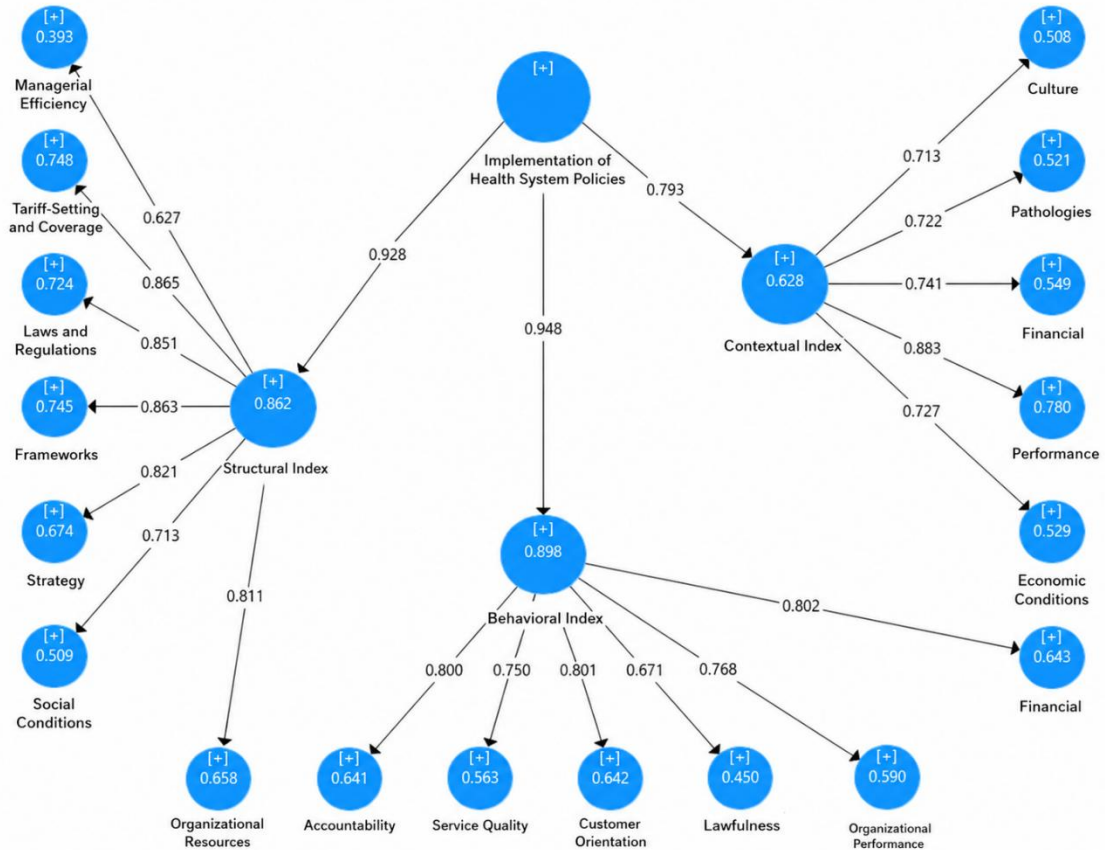


Figure 1. Measurement Model of the Study in the Coefficient Estimation Mode

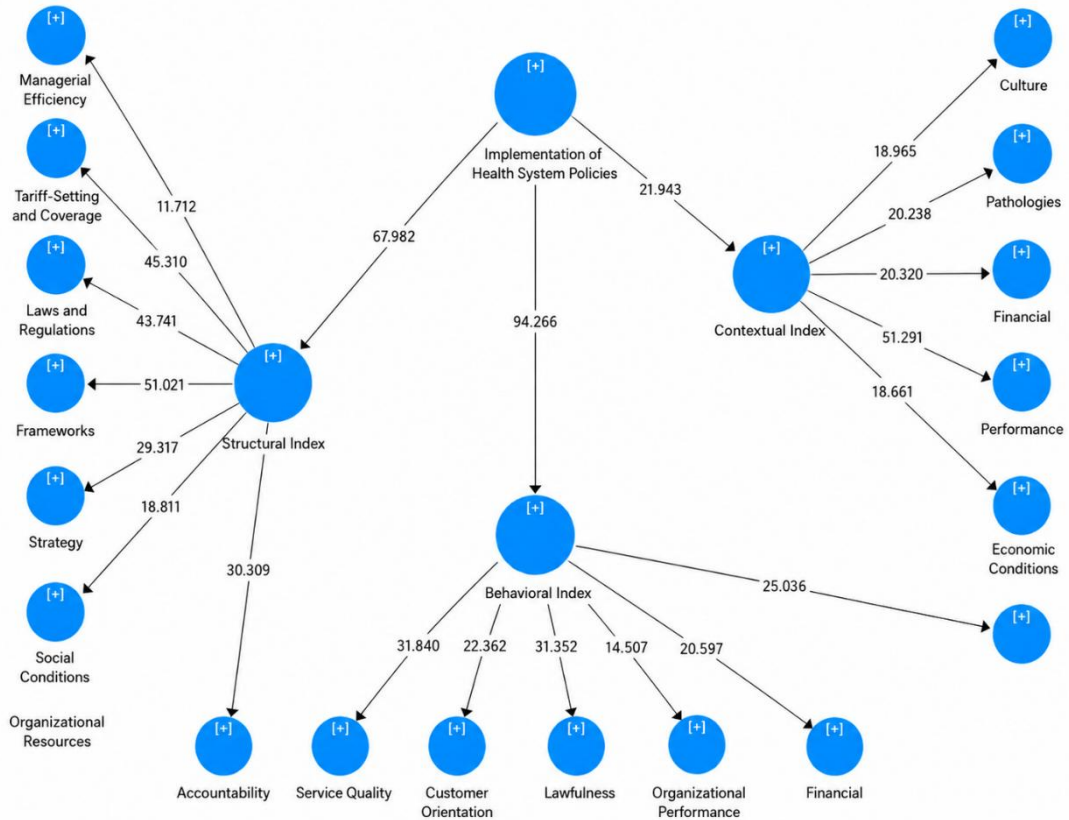


Figure 2. Measurement Model of the Study in the Coefficient Significance Mode

Discussion and Conclusion

The present study aimed to validate a model for implementing health system policies in the Social Security Organization. The findings confirmed the adequacy of the proposed model from both measurement and structural perspectives. The reliability and validity indices, including AVE values above 0.50 and Cronbach's alpha and composite reliability values above 0.70, indicated that the constructs were measured with acceptable internal consistency and convergent validity. In addition, the model fit and predictive indices, including adjusted $R^2 = 0.601$, $GOF = 0.425$, and $Q^2 = 0.378$, demonstrated that the model had strong explanatory and predictive power. These results indicate that the implementation of health system policies in the Social Security Organization is not a single-dimensional administrative process but a multidimensional phenomenon shaped by structural, behavioral, and contextual components. This finding is consistent with previous studies emphasizing that the effective implementation of health policies requires simultaneous attention to governance arrangements, administrative structures, financial mechanisms, stakeholder relations, and contextual readiness (Abolhasani et al., 2024; Masoumi et al., 2019). It also aligns with the view that health policy implementation should be examined through evidence-based and system-oriented models capable of identifying the interaction between policy design, institutional capacity, and implementation environment (Gholipour Souteh et al., 2019; Langlois et al., 2019).

One of the most important findings of the study was the strong and significant relationship between health system policy implementation and the three main indices of the model, namely structural, behavioral, and contextual indices. Among these, the behavioral index had the highest path coefficient, followed by the structural and contextual indices. This suggests that while formal structures and environmental conditions are essential, the actual implementation of health policies depends heavily on behavioral and organizational practices such as accountability, service quality, customer orientation, lawfulness, financial discipline, and organizational performance. This result is consistent with studies showing that the implementation of health reforms depends not only on laws and formal programs but also on the behavior of organizations, managers, professionals, and service providers (Hayran et al., 2019; Piskorz-Ryń et al., 2024). In other words, even well-designed policies may fail if they are not translated into accountable behaviors, responsive services, and effective organizational routines. This finding also supports policy implementation literature emphasizing that resistance, conflict, and weak behavioral alignment can reduce the effectiveness of health reforms (Baki Hashemi et al., 2021; Mohammadi et al., 2022).

The strong effect of the structural index on health system policy implementation indicates that policy execution in the Social Security Organization is highly dependent on institutional architecture, managerial efficiency, regulations, frameworks, strategies, tariff-setting mechanisms, population coverage, social conditions, and organizational resources. Among the structural components, tariff-setting and coverage, frameworks, and laws and regulations had the strongest coefficients. This finding shows that in an insurance-based health organization, financial and regulatory architecture plays a central role in policy implementation. Health policies become operational through tariffs, benefit packages, coverage rules, contractual arrangements, legal mandates, and administrative frameworks. This result is consistent with prior evidence that health system reforms require coherent governance mechanisms, stable rules, and institutional alignment to prevent policy fragmentation and implementation failure (Ebrahimi et al., 2020; Rahmani et al., 2023). It also supports studies that identify political and administrative analysis as essential for understanding how rules, interests, and institutions influence the execution of health policies (Campos & Reich, 2019).

The significance of managerial efficiency within the structural index also deserves attention, although its coefficient was lower than several other structural components. This finding suggests that managerial efficiency is important but cannot independently compensate for weaknesses in regulations, frameworks, coverage arrangements, or organizational resources. In large public organizations, managers implement policy within predefined legal, financial, and institutional boundaries. Therefore, managerial capability should be understood as embedded within the broader structural context of governance. Previous studies on health system efficiency have similarly emphasized that managerial performance must be evaluated in relation to organizational inputs, institutional constraints, service outputs, and system-level conditions (Kohl et al., 2019; Mbau et al., 2023). Thus, improving implementation requires not only training competent managers but also redesigning the organizational and regulatory environment in which managerial decisions are made.

The behavioral index had the highest direct relationship with health system policy implementation, indicating that the quality of implementation is strongly shaped by how the organization behaves toward patients, beneficiaries, providers, and other stakeholders. Within this index, financial factors, customer orientation, accountability, organizational performance, service quality, and lawfulness were all significant. These findings suggest that policy implementation becomes credible when it is reflected in responsible financial management, client-centered services, transparent accountability mechanisms, lawful conduct, and measurable organizational performance. This is consistent with the patient-centered care literature, which emphasizes that successful implementation requires the active involvement of providers, attention to patient experiences, and organizational readiness for service improvement (Piskorz-Ryń et al., 2024). It is also aligned with studies on organizational health literacy, which show that institutions must be able to communicate, guide, and support service users effectively if policies are to produce equitable and accessible outcomes (Hayran et al., 2019).

The strong role of accountability and customer orientation in the behavioral dimension highlights the necessity of moving from bureaucratic implementation toward responsive policy execution. In health systems, citizens and insured populations are not merely passive recipients of services; rather, they are stakeholders whose needs, trust, and experiences shape the legitimacy of health policies. Evidence on government–citizen interaction in public health policy communication indicates that trust, responsiveness, and communication quality influence how policies are perceived and accepted by the public (Zhang & Lu, 2025). Similarly, public sector communication strategies in healthcare contexts demonstrate that policy success depends partly on how organizations communicate priorities, explain procedures, and interact with service users (Tshuma & Mpofu, 2024). Therefore, the present finding suggests that the Social Security Organization should consider behavioral indicators as core implementation criteria, not merely as secondary service-quality outcomes.

The contextual index also had a significant effect on health system policy implementation, although its coefficient was lower than those of the behavioral and structural indices. This finding indicates that policy implementation is influenced by broader environmental conditions such as culture, pathologies, financial conditions, performance conditions, and economic circumstances. Among contextual components, performance had the highest coefficient, followed by financial and economic conditions. This implies that implementation capacity is shaped by both internal performance conditions and external macro-level constraints. Health system resilience literature supports this interpretation by emphasizing that systems must adapt to changing economic, institutional, and crisis-related conditions while maintaining essential functions (Fridell et al., 2020). Lessons from health system reform during COVID-19 also show that reforms are more likely to succeed when implementation structures are flexible, financially realistic, and responsive to system-level pressures (Parker et al., 2025).

The significance of financial and economic contextual factors is particularly important for the Social Security Organization, as it operates at the intersection of insurance financing, service purchasing, and healthcare provision. The finding that financial conditions are significant in both behavioral and contextual dimensions indicates that financial sustainability is both an organizational behavior issue and an environmental constraint. In this sense, health policy implementation depends on how financial resources are allocated, controlled, and protected from instability. Previous studies on health system efficiency confirm that resource constraints and financing structures are central to assessing system performance and policy outcomes (Mbau et al., 2023). Moreover, research on elderly social health policy models suggests that demographic change and rising service needs require long-term financing strategies and coordinated policy planning (Koosha et al., 2025). Therefore, the Social Security Organization must interpret health policy implementation through the lens of long-term fiscal sustainability, especially in the context of aging, rising medical costs, and increasing demand for specialized services.

The results also identified several major challenges in the implementation of health policies in the Social Security Organization, including weakness in monitoring and evaluation, shortage of sustainable financial resources, political interference, lack of consolidation of insurance funds, and structural inefficiency. These challenges are consistent with previous Iranian health policy studies that have reported institutional fragmentation, policy conflict, and implementation resistance as recurring barriers to reform (Abolhasani et al., 2024; Baki Hashemi et al., 2021; Mohammadi et al., 2022). The role of political interference is also consistent with the argument that political analysis is indispensable for health policy implementation because reforms often redistribute resources, authority, and organizational responsibilities (Campos & Reich, 2019). From this perspective, weak implementation should not be attributed solely to technical problems; it may also reflect unresolved conflicts, unstable coalitions, and insufficient alignment among policy actors (Ebrahimi et al., 2020).

The Friedman ranking showed that free and healthy competition was the most important factor affecting implementation, followed by alignment of expertise with duties and reduction of out-of-pocket payments. The priority assigned to free and healthy competition suggests that respondents considered competitive and transparent institutional arrangements as essential for improving efficiency, quality, and accountability. This is consistent with the broader efficiency literature, which emphasizes that performance comparison, resource optimization, and institutional incentives can improve healthcare system outcomes (Kohl et al., 2019; Mbau et al., 2023). The second priority, alignment of expertise with duties, highlights the importance of human resource fit and professional competence in implementing health policy. This finding is compatible with studies emphasizing organizational readiness, provider perspectives, and workforce capacity as prerequisites for implementing patient-centered and quality-oriented models of care (Piskorz-Ryń et al., 2024). The third priority, reducing out-of-pocket payments, reflects the central role of financial protection in health system legitimacy and social justice, particularly in insurance organizations responsible for protecting beneficiaries from excessive healthcare costs.

The present findings can also be interpreted in light of emerging changes in digital governance, artificial intelligence, and public health communication. The increasing complexity of health policy implementation requires information systems, digital monitoring, electronic health records, and data-driven evaluation mechanisms. Digital-era governance provides a framework for redesigning health policy implementation through integrated services, administrative coordination, and improved responsiveness (Klenk, 2025). Artificial intelligence may also support forecasting, policy monitoring, risk assessment, and decision support in public health management (Aslan, 2024). However, the use of AI and digital systems should be accompanied by ethical safeguards, transparency, and public health risk management, especially when

technologies influence sensitive decisions or vulnerable populations (Ohu, 2025). Therefore, digital transformation can strengthen the validated model, but only if it is embedded within accountable governance and legally regulated implementation structures.

The contextual findings of this study further indicate that health policy implementation should be sensitive to social vulnerability, equity, and population diversity. Health policies may affect different groups unequally, and implementation mechanisms should consider gender, migration, aging, mental health, and social exclusion. Studies have shown that gendered power structures may influence participation in health policymaking (Inayat et al., 2024), while exclusionary attitudes toward undocumented immigrants can shape access-related health policy debates (Nunez, 2025). Evidence on immigrant mothers and young children also shows that health and mental health needs are deeply embedded in psychosocial and family contexts (Paris, 2025). These findings support the inclusion of contextual indicators in the present model and suggest that health policy implementation in insurance organizations should be assessed not only through efficiency and structure but also through equity, inclusion, and responsiveness to vulnerable populations.

The findings also have implications for mental health and preventive policy domains. Contemporary health systems increasingly face policy challenges related to mental health, digital behavior, school environments, and workplace psychosocial risks. Studies have shown that school mental health policies can affect well-being and perceived school climate (Schrijvers et al., 2026), while policies addressing internet use among children and adolescents require comprehensive public health initiatives beyond simple restrictions (Tadpatrikar, 2025; Weiss & Bonell, 2025). In addition, national policy frameworks for worker mental health are related to organizational psychosocial safety climate (Potter et al., 2024). These studies support the behavioral and contextual assumptions of the present model, because they demonstrate that policy implementation requires attention to organizational climate, service behavior, communication, social context, and measurable psychosocial outcomes. Thus, the validated model may be useful not only for general health system policy but also for specialized domains such as mental health, occupational health, and preventive care.

Overall, the results of this study confirm that the implementation of health system policies in the Social Security Organization should be conceptualized as an integrated process involving structural capacity, behavioral effectiveness, and contextual readiness. The strong model indices indicate that the proposed framework can explain a substantial proportion of the variance in policy implementation and can serve as a practical diagnostic tool for identifying implementation priorities. The findings are consistent with national and international literature showing that successful health policy implementation requires coherent rules, stable financing, evidence-informed decision-making, organizational accountability, communication capacity, managerial efficiency, stakeholder alignment, and sensitivity to social context (Abolhasani et al., 2024; Campos & Reich, 2019; Langlois et al., 2019; Rahmani et al., 2023). Therefore, the validated model provides a theoretically grounded and empirically supported basis for strengthening health policy implementation in the Social Security Organization and similar public insurance institutions.

This study was limited to managers and senior experts of the Social Security Organization, and therefore the views of other key stakeholders, including patients, insured individuals, physicians, nurses, service providers, and policymakers outside the organization, were not directly examined. The use of convenience sampling may also limit the generalizability of the findings to all administrative and clinical units of the organization. In addition, the data were collected through a researcher-made questionnaire, which, despite acceptable validity and reliability indicators, may still be affected by self-report bias and

respondents' organizational perceptions. The cross-sectional nature of the study also prevents causal interpretation of the relationships among variables.

Future studies should examine this model in other health insurance funds, public hospitals, private healthcare organizations, and policymaking institutions in order to compare the stability and applicability of the model across different organizational contexts. It is also recommended that future research use mixed-method designs by combining structural equation modeling with interviews, focus groups, or Delphi panels to obtain deeper insight into the mechanisms behind policy implementation barriers. Longitudinal studies can also be conducted to assess whether improvements in structural, behavioral, and contextual components lead to measurable changes in service quality, financial protection, organizational performance, and policy sustainability over time.

Senior managers and policymakers in the Social Security Organization should use the validated model as a diagnostic framework for evaluating the implementation status of health policies and identifying priority areas for reform. Particular attention should be given to strengthening monitoring and evaluation systems, improving tariff-setting and coverage mechanisms, reducing political interference, enhancing financial sustainability, and aligning human resource expertise with organizational duties. The organization should also institutionalize accountability, customer orientation, transparent communication, and service quality improvement as core behavioral components of policy implementation. Finally, the results suggest that reducing out-of-pocket payments and creating a fair, competitive, and efficient service environment should be treated as central policy priorities.

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Authors' Contributions

Authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

AI use statement

Artificial intelligence tools were used only to support language editing, translation refinement, formatting, and consistency checks. The authors take full responsibility for the accuracy of the data, analyses, interpretations, citations, and final content of the manuscript.

Ethical Considerations

This study was conducted using interview and questionnaire data. Participation was voluntary, and the confidentiality of participants' responses was preserved. The research procedure was designed to avoid harm to participants and to respect the principles of informed participation and academic integrity.

Transparency of Data

Reasonable requests for research materials should be directed to the corresponding author, subject to university policies and participant confidentiality.

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References

- Abolhasani, M., Zarea, H., & Zanganeh, Z. (2024). Health Policy Implementation in Iran: A Scoping Review of Success and Failure Factors. *Journal of Research and Health*, 14(4), 316-329. https://tkj.ssu.ac.ir/browse.php?a_id=1278&sid=1&slc_lang=fa&html=1
- Aslan, E. C. (2024). Artificial Intelligence in Public Health and Health Policies. 227-240. <https://doi.org/10.1201/9781003495406-11>
- Baki Hashemi, S. M. M., Ebrahimi, S. A., Farhadinejad, M., & Yazdizadeh, B. (2021). Policy Conflict Management in the Health System Policy-making Process Elements, Effects and Solutions. *Iranian Journal of Public Policy*, 7(3), 77-98. https://jppolicy.ut.ac.ir/article_83369_en.html?lang=en
- Campos, P. A., & Reich, M. R. (2019). Political Analysis for Health Policy Implementation. *Health Systems & Reform*, 5(1-12). <https://doi.org/10.1080/23288604.2019.1625251>
- Ebrahimi, S. A., Farhadi Nejad, M., & Bakihashemi, S. M. M. (2020). Policy Analysis in the Health System Based on the Advocacy Coalition Framework: A Case Study of the Health System Transformation Plan. *Strategic Studies*, 23(2), 95-112. https://quarterly.risstudies.org/article_114581.html
- Fridell, M., Edwin, S., von Schreeb, J., & Saulnier, D. D. (2020). Health System Resilience: What Are We Talking About? A Scoping Review Mapping Characteristics and Keywords. *International Journal of Health Policy and Management*, 9(1), 6-16. <https://doi.org/10.15171/ijhpm.2019.71>
- Gholipour Souteh, R., Mafi Moradi, S., Rahnavard Ahan, F., & Ovi Ardakan, M. (2019). Analysis of the Research System in Health Policy Making in Developing Countries. *Iranian Public Administration Studies*, 2(2). <https://sanad.iau.ir/fa/Article/1103387?FullText=FullText>
- Hayran, O., Atac, O., & Ozer, O. (2019). Assessment of organizational health literacy in a group of public, private and university hospitals in Istanbul. *Journal of Health Systems and Policies*, 1. <https://dergipark.org.tr/en/pub/jhesp/issue/39338/437459>
- Inayat, S., Younas, A., & Ali, P. (2024). "Patriarchy Permeating Health Policymaking": Influence of Gender on Involvement in Health Policymaking From Nurse Leaders' Perspective. *World Medical & Health Policy*, 16(4), 677-691. <https://doi.org/10.1002/wmh3.631>
- Klenk, T. (2025). Towards Digital Era Governance? Examining Health Policy Through the Lens of Public Administration / Digital Era Governance in Der Gesundheitspolitik? Eine Analyse Von Gesundheitsreformen Aus Verwaltungswissenschaftlicher Perspektive. *Der Moderne Staat – Zeitschrift Für Public Policy Recht Und Management*, 17(2-2024), 263-282. <https://doi.org/10.3224/dms.v17i2.05>
- Kohl, S., Schoenfelder, J., Fügner, A., & Brunner, J. O. (2019). The use of Data Envelopment Analysis (DEA) in healthcare with a focus on hospitals. *Health Care Management Science*, 22(2), 245-286. <https://doi.org/10.1007/s10729-018-9436-8>
- Koosha, M., Hezarjaribi, J., Allameh, H., Panahi, M. A., & Lalegani, A. (2025). Designing a Policy Model for Enhancing Social Health of the Elderly. *Archives of Gerontology and Geriatrics Plus*, 2(2), 1-10. <https://doi.org/10.1016/j.aggp.2025.100149>
- Langlois, É. V., Mancuso, A., Elías, V., & Revéiz, L. (2019). Embedding Implementation Research to Enhance Health Policy and Systems: A Multi-Country Analysis From Ten Settings in Latin America and the Caribbean. *Health Research Policy and Systems*, 17(1). <https://doi.org/10.1186/s12961-019-0484-4>
- Masoumi, Z., Sanei, M., & Hemmatian, H. (2019). Presenting a Model for Effective Implementation of Health System Policies, Management Strategies in the Health System. *Management strategies in the health system*, 4(2), 135-125. <https://doi.org/10.18502/mshsj.v4i2.1408>
- Mbau, R., Musiega, A., Nyawira, L., Tsofa, B., Mulwa, A., Molyneux, S., Maina, I., Jemutai, J., Normand, C., Hanson, K., & Barasa, E. (2023). Analysing the efficiency of health systems: a systematic review of the literature. *Applied Health Economics and Health Policy*, 21(2), 205-224. <https://doi.org/10.1007/s40258-022-00785-2>
- Mohammadi, H., Pourezzat, A., Abooyee, A. M., & Mortazavi, M. (2022). Policy resistance in the Health System Reform Plan. <https://www.sid.ir/paper/1039078/%D8%AE%D8%B1%DB%8C%D8%AF%20%D8%A7%D9%82%D8%B3%D8%A7%D8%B7%DB%8C%20%DA%AF%D9%88%D8%B4%DB%8C%20%D8%A2%DB%8C%D9%81%D9%88%D9%86%2014>
- Nunez, C. V. (2025). Pandemic Times and Health Care Exclusion: Attitudes Toward Health Care Exclusion of Undocumented Immigrants. *Journal of Health Politics Policy and Law*, 50(1), 1-21. <https://doi.org/10.1215/03616878-11513062>
- Ohu, F. C. (2025). Public Health Risk Management, Policy, and Ethical Imperatives in the Use of AI Tools for Mental Health Therapy. *Healthcare*, 13(21), 2721. <https://doi.org/10.3390/healthcare13212721>
- Paris, R. (2025). Trauma and Mental Health: Examining Psychosocial Changes for Latin American Immigrant Mothers and Young Children Participating in Child–parent Psychotherapy. *Psychological Trauma Theory Research Practice and Policy*. <https://doi.org/10.1037/tra0002071>
- Parker, S., Schulmann, K., Bruen, C., & Burke, S. (2025). Health system reform in the context of COVID-19: a policy brief outlining lessons from Ireland's journey towards the goal of universal healthcare. *Global Health Research and Policy*, 10(1), 1-7. <https://doi.org/10.1186/s41256-025-00407-z>

- Piskorz-Ryń, O., Olsen, G., Karstensen, V., & Gottschlich, D. (2024). Healthcare Providers' Perspectives on the Implementation of Patient-Centered Care Models in Hospitals. *Health Nexus*, 2(3), 80-88. <https://doi.org/10.61838/kman.hn.2.3.10>
- Potter, R. E., Dollard, M., Lerouge, L., Jain, A., Leka, S., & Cefaliello, A. (2024). National Policy Index (NPI) for worker mental health and its relationship with enterprise psychosocial safety climate. *Safety Science*, 172, 106428. <https://doi.org/10.1016/j.ssci.2024.106428>
- Rahmani, F., Fathi Rad, N., Madahian, S., Zayandeh Rudi, A., & Derakhshan, A. (2023). Presenting a Model for Evaluating Health Policies in the Administrative System Based on Upstream Documents: A Study in the Ministry of Economic Affairs and Finance. *Journal of Management and Sustainable Development Studies*, 3(1).
- Schrijvers, K., Willems, B., Buyl, A., Deforche, B., & Dierckens, M. (2026). Mental Health Policies in Secondary Schools and Their Impact on Student Well-Being and Perceived School Climate. *School Mental Health*. <https://doi.org/10.1007/s12310-026-09861-7>
- Tadpatrikar, A. (2025). Policies and Public Health Initiatives to Mitigate the Mental Health Impact of Internet Use Among Children and Adolescents. *Indian Journal of Psychiatry*, 67(12), 1180-1186. https://doi.org/10.4103/indianjpsychiatry_409_25
- Tshuma, V., & Mpfu, S. (2024). Analysing Public Policies and Communication Strategies in Zimbabwe's Eye Healthcare Industry. In *Public Sector Communication in the Digital Age* (pp. 201-227). <https://doi.org/10.36615/9781776489909-08>
- Weiss, H. A., & Bonell, C. (2025). Smartphone use and mental health: Going beyond school restriction policies. *The Lancet Regional Health - Europe*, 51, 101237. <https://doi.org/10.1016/j.lanepe.2025.101237>
- Zhang, X., & Lu, F. (2025). Enhancing Public Health Policy Communication Through Government-Citizen Social Media Interactions: The Impact of Replying Agents, Inquiry Tone, and Institutional Trust. *Policy & Internet*, 17(1). <https://doi.org/10.1002/poi3.70000>